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EXAMINER	
QUINONES, ISMAEL C	
ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/981,268	WENZEL ET AL.	
	Examiner	Art Unit	
	Ismael Quiñones	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on June 29, 2004. **Claims 1-23** are still pending in the present application. **This Action is made FINAL.**

Claim Objections

2. Claims **1 and 15** are objected to because of the following informalities:

The removal of the additional word "the" preceding "plurality" (See line 8 (claim 1) and line 13 (claim 15)). Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 7-9, 15, and 21-23** are rejected under 35 U.S.C. 102(e) as being anticipated by Ton (U.S. P.G.-Pub. No. 2002/0067704).

Regarding **claim 1**, Ton discloses method for registering a subscriber unit with a home agent in a cellular system (A cellular system incorporating data communications packet switched networks and that deploys several home agents and a subscriber unit or Mobile Node; *Page 2, Paragraph 19; Figs. 2-5*) the method comprising: storing addresses for a plurality of home

agents in the subscriber unit (Wherein the cellular system/network provides a list of Home Agents attached to a Mobile IP reply message (Mobile IP RRP) through which the subscriber unit may register, and subsequently the subscriber unit stores said list of alternate Home Agents for redundancy support; *Pages 2-3, Paragraph 23 and 28; Page 5, Paragraphs 60-62*), wherein the plurality of home agents includes a primary home agent and a plurality of secondary home agent (Wherein the subscriber unit is statically configured to a primary Home Agent for registration and in case of failure, the network provides a list of secondary Home Agents through which the subscriber unit may register, or in an alternate embodiment the list is statically configured as well in the subscriber unit if no modifications are made in the system/network mobility agents; *Pages 2-3, Paragraphs 23-26 and 28; Page 4, Paragraphs 55-57; Page 5; Paragraphs 60-62*); attempting registration with the primary home agent; failing to achieve registration with the primary home agent (The subscriber unit is statically configured to attempt registration with a given #1 Home Agent, HA1; *Page 3, Paragraph 36 and 40; Page 4, Paragraph 44; Page 6, Paragraph 81*); the subscriber unit selecting a secondary home agent from the plurality of secondary home agents in an attempt to balance load among the plurality of secondary home agents (The mobile node attempting registration with a primary Home Agent HA1, subsequently the network attempting to balanced the load between different or secondary home agents, and through the network selecting or choosing a home agent having a lower load; *Page 3, Paragraph 40*); attempting registration with the secondary home agent (Wherein the subscriber unit selects and attempts registration with a secondary home agent due to failure when attempting registration with primary home agent; *Page 3, Paragraph 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*).

Regarding **claim 7**, and as applied to claim 1, Ton discloses the aforementioned method, wherein the plurality of addresses for the home agents stored in the subscriber unit is programmed by a service provider prior to delivering the subscriber unit to its subscriber (Wherein the subscriber unit is statically configured to a given Home Agent for primarily registering to it, also describing means for implementing hardware or software redundancy when statically configuring a subscriber unit as an implementation for selecting alternate home agents; *Page 3, Paragraphs 36 and 42; Page 4, Paragraph 55; Page 5, Paragraph 71*).

Regarding **claim 8**, and as applied to claim 1, Ton discloses the aforementioned method, wherein the plurality of addresses for the home agents stored in the subscriber unit is programmed by the service provider using over the air access (Wherein in case of failure attempting registration with a primary home agent, the network which is incorporated in a wireless or cellular system delivers Mobile IP replies to the subscriber unit in a wireless fashion so that the subscriber unit can select a from a list of alternate home agents for attempting registration; *Page 4, Paragraphs 55-57; Page 5, Paragraphs 60-62*).

Regarding **claim 9**, and as applied to claim 1, Ton discloses the aforementioned method, wherein at least some of the plurality of addresses for the home agents stored in the subscriber unit is reprogrammed by the service provider using over the air access (Reprogramming means such as the service provider or home network incorporated into a wireless or cellular system replying in a wireless fashion with additional or alternate home agents for the subscriber unit to attempt registration when failure at attempting registration occurs with a primary home agent; *Page 4, Paragraphs 55-57; Pages 5-6, Paragraphs 60-62 and Paragraphs 75-78*).

Regarding **claim 15**, Ton discloses a subscriber unit that operates within a cellular system, the subscriber unit comprising: an antenna; a radio frequency unit coupled to the antenna; and at least one digital processor coupled to the radio frequency unit that executes software instructions (A mobile terminal that comprises the RF features such as an antenna, a radio frequency unit, and a digital processor; *Page 1, Paragraphs 2-3*) causing the subscriber unit to: store addresses for a plurality of home agents in the subscriber unit (Wherein the cellular system/network provides a list of Home Agents attached to a Mobile IP reply message (Mobile IP RRP) through which the subscriber unit may register, and subsequently the subscriber unit stores said list of alternate Home Agents for redundancy support, in which that redundancy support could be handled on a software redundancy implementation; *Pages 2-3, Paragraph 23 and 28; Page 4, Paragraph 55; Page 5, Paragraphs 60-62*), wherein the plurality of home agents includes a primary home agent and at least one secondary home agent (Wherein the subscriber unit is statically configured to a primary Home Agent for registration and in case of failure, the network provides a list of secondary Home Agents through which the subscriber unit may register, or in an alternate embodiment the list is statically configured as well in the subscriber unit if no modifications are made in the system/network mobility agents; *Pages 2-3, Paragraphs 23-26 and 28; Page 4, Paragraphs 55-57; Page 5; Paragraphs 60-62*); attempt registration with the primary home agent (The subscriber unit is statically configured to attempt registration with a given #1 Home Agent, HA1; *Page 3, Paragraph 36 and 40; Page 4, Paragraph 44; Page 6, Paragraph 81*); failing to achieve registration with the primary home agent (Wherein the request for registration of the subscriber unit is not completed due to failure of the primary home agent; *Page 3, Paragraphs 38-39; Fig.1, steps 120 thru 140*); select a

secondary home agent from the plurality of secondary home agents in an attempt to balance load among the plurality of secondary home agents (The mobile node attempting registration with a primary Home Agent HA1, subsequently the network attempting to balanced the load between different or secondary home agents, and through the network selecting or choosing a home agent having a lower load; *Page 3, Paragraph 40*); and attempt registration with the secondary home agent (Wherein the subscriber unit selects and attempts registration with a secondary home agent due to failure when attempting registration with primary home agent; *Page 3, Paragraph 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*).

Regarding **claim 21**, and as applied to claim 15, Ton discloses the aforementioned subscriber unit, wherein the plurality of addresses for the home agents stored in the subscriber unit is programmed by a service provider prior to delivering the subscriber unit to its subscriber (Wherein the subscriber unit is statically configured to a given Home Agent for primarily registering to it, also describing means for implementing hardware or software redundancy when statically configuring a subscriber unit as an implementation for selecting alternate home agents; *Page 3, Paragraphs 36 and 42; Page 4, Paragraph 55; Page 5, Paragraph 71*).

Regarding **claim 22**, and as applied to claim 15, Ton discloses the aforementioned subscriber unit, wherein the plurality of addresses for the home agents stored in the subscriber unit is programmed by the service provider using over the air access (Wherein in case of failure attempting registration with a primary home agent, the network which is incorporated in a wireless or cellular system delivers Mobile IP replies to the subscriber unit in a wireless fashion so that the subscriber unit can select a from a list of alternate home agents for attempting registration; *Page 4, Paragraphs 55-57; Page 5, Paragraphs 60-62*).

Regarding **claim 23**, and as applied to claim 15, Ton discloses the aforementioned subscriber unit, wherein at least some of the plurality of addresses for the home agents stored in the subscriber unit is reprogrammed by the service provider using over the air access (Reprogramming means such as the service provider or home network incorporated into a wireless or cellular system replying in a wireless fashion with additional or alternate home agents for the subscriber unit to attempt registration when failure at attempting registration occurs with a primary home agent; *Page 4, Paragraphs 55-57; Pages 5-6, Paragraphs 60-62 and Paragraphs 75-78*).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. **Claims 2-3, 10-11, and 16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ton (U.S. P.G.-Pub. No. 2002/0067704) in view of Troxel et al. (U.S. P.G.-Pub. No. 2002/0078238).

Regarding **claim 2**, and as applied to claim 1, Ton discloses the aforementioned method further comprising: the subscriber unit rank ordering the plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent (Wherein the plurality of secondary home agents are ranked, so when one registration attempt fails with the current home agent, the next secondary home agent becomes the new primary home agent changing its rank to 1; *Page 6, Paragraph 82*). Ton fails to clearly specify the subscriber unit rank ordering the plurality of home agents.

In the same field of endeavor, Troxel et al. disclose a method for a communication network wherein a mobile node ranks foreign agents based on several factors such as services and capacity (*Page 4, Paragraph 51*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton method for rank ordering a plurality of secondary home agents to include means for rank ordering the home agents at a mobile node as taught by Troxel et al. for the purpose of relaying and assisting network management decision procedures, thus setting up a faster registration for a particular subscriber.

Regarding **claim 3**, and as applied to claim 2, Ton in view of Troxel et al. discloses the aforementioned method. In addition Ton disclose the aforementioned method further comprising: attempting registration with the first secondary home agent (Wherein the subscriber unit attempts registration with an alternate or first secondary Home Agent, HA2; *Page 3, Paragraph 36 and*

40; Page 4, Paragraph 44; Page 6, Paragraph 81; Page 4, Paragraphs 36 and 40; Page 5, Paragraphs 64-65); failing to achieve registration with the first secondary home agent (Wherein the subscriber unit selects and attempts registration with a secondary home agent due to failure when attempting registration with a previous home agent; *Page 3, Paragraph 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*); and attempting registration with the second secondary home agent (Wherein the objective of the invention is to provide alternate home agents in case of failure when attempting registration with a current home agent, subsequently attempting registration if such consecutive failure occurs during the process, therefore the subscriber unit selects and attempts registration with a second secondary home agent due to failure when attempting registration with a previous home agent; *Page 3, Paragraphs 36 and 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*).

Regarding **claim 10**, Ton discloses a method for registering a subscriber unit with a home agent in a cellular system (A cellular system incorporating data communications packet switched networks and that deploys several home agents and a subscriber unit or Mobile Node; *Page 2, Paragraph 19; Figs. 2-5*), the method comprising: storing addresses for a plurality of home agents in the subscriber unit (Wherein the cellular system/network provides a list of Home Agents attached to a Mobile IP reply message (Mobile IP RRP) through which the subscriber unit may register, and subsequently the subscriber unit stores said list of alternate Home Agents for redundancy support; *Pages 2-3, Paragraph 23 and 28; Page 5, Paragraphs 60-62*), wherein the plurality of home agents includes a primary home agent and a plurality of secondary home agents (Wherein the subscriber unit is statically configured to a primary Home Agent for registration and in case of failure, the network provides a list of secondary Home Agents through

which the subscriber unit may register, or in an alternate embodiment the list is statically configured as well in the subscriber unit if no modifications are made in the system/network mobility agents; *Pages 2-3, Paragraphs 23-26 and 28; Page 4, Paragraphs 55-57; Page 5; Paragraphs 60-62*); attempting registration with the primary home agent (The subscriber unit is statically configured to attempt registration with a given #1 Home Agent, HA1; *Page 3, Paragraph 36 and 40; Page 4, Paragraph 44; Page 6, Paragraph 81*); failing to achieve registration with the primary home agent (Wherein the request for registration of the subscriber unit is not completed due to failure of the primary home agent; *Page 3, Paragraphs 38-39; Fig.1, steps 120 thru 140*); rank ordering the plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent (Wherein the plurality of secondary home agents are ranked, so when one registration attempt fails with the current home agent, the next secondary home agent becomes the new primary home agent changing its rank to 1; *Page 6, Paragraph 82*) in an attempt to balance the load (The mobile node attempting registration with a primary Home Agent HA1, subsequently the network attempting to balanced the load between different or secondary home agents, and through the network selecting or choosing a home agent having a lower load; *Page 3, Paragraph 40*); and attempting registration with the first secondary home agent (Wherein the subscriber unit selects and attempts registration with a secondary home agent due to failure when attempting registration with primary home agent; *Page 3, Paragraph 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*). Ton fails to clearly specify the subscriber unit rank ordering the plurality of home agents.

In the same field of endeavor, Troxel et al. disclose a method for a communication network wherein a mobile node ranks foreign agents based on several factors such as services and capacity (*Page 4, Paragraph 51*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton method for rank ordering a plurality of secondary home agents to include means for rank ordering the home agents at a mobile node as taught by Troxel et al. for the purpose of relaying and assisting network management decision procedures, thus setting up a faster registration for a particular subscriber.

Regarding **claim 11**, and as applied to claim 10, Ton in view of Troxel et al. disclose the aforementioned method. In addition Ton discloses the method further comprising: failing to achieve registration with the first secondary home agent (Wherein the subscriber unit selects and attempts registration with a secondary home agent due to failure when attempting registration with a previous home agent; *Page 3, Paragraph 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*); and attempting registration with the second secondary home agent (Wherein the objective of the invention is to provide alternate home agents in case of failure when attempting registration with a current home agent, subsequently attempting registration if such consecutive failure occurs during the process, therefore the subscriber unit selects and attempts registration with a second secondary home agent due to failure when attempting registration with a previous home agent; *Page 3, Paragraphs 36 and 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*).

Regarding **claim 16**, and as applied to claim 15, Ton discloses the aforementioned subscriber unit, wherein execution of software instructions further causes the subscriber unit to:

rank order the plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent (Wherein the plurality of secondary home agents are ranked, so when one registration attempt fails with the current home agent, the next secondary home agent becomes the new primary home agent changing its rank to 1; *Page 6, Paragraph 82*). Ton fails to clearly specify the subscriber unit rank ordering the plurality of home agents.

In the same field of endeavor, Troxel et al. disclose a method for a communication network wherein a mobile node ranks foreign agents based on several factors such as services and capacity (*Page 4, Paragraph 51*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton method for rank ordering a plurality of secondary home agents to include means for rank ordering the home agents at a mobile node as taught by Troxel et al. for the purpose of relaying and assisting network management decision procedures, thus setting up a faster registration for a particular subscriber.

Regarding **claim 17**, and as applied to claim 16, Ton in view of Troxel et al. disclose the aforementioned subscriber unit. In addition Ton disclose attempting registration with the first secondary home agent (Wherein the subscriber unit attempts registration with an alternate or first secondary Home Agent, HA2; *Page 3, Paragraph 36 and 40; Page 4, Paragraph 44; Page 6, Paragraph 81*; Page 4, Paragraphs 36 and 40; Page 5, Paragraphs 64-65); fail to achieve registration with the first secondary home agent (Wherein the subscriber unit selects and attempts registration with a secondary home agent due to failure when attempting registration with a previous home agent; *Page 3, Paragraph 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*); and attempt registration with the second secondary home agent (Wherein the objective

of the invention is to provide alternate home agents in case of failure when attempting registration with a current home agent, subsequently attempting registration if such consecutive failure occurs during the process, therefore the subscriber unit selects and attempts registration with a second secondary home agent due to failure when attempting registration with a previous home agent; *Page 3, Paragraphs 36 and 40; Page 5, Paragraphs 63-64; Fig. 1, steps 150 thru 180*).

8. **Claims 4 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ton (U.S. P.G.-Pub. No. 2002/0067704) in view of Troxel et al. (U.S. P.G.-Pub. No. 2002/0078238), further in view of Jue et al. ("Design and Analysis of Replicated Server Architecture for Supporting IP-Host Mobility"), even further in view of Tiedemann et al. (U.S. Pat. No. 6,615,050).

Regarding **claim 4**, and as applied to claim 2, Ton in view of Troxel et al. discloses the aforementioned method wherein the subscriber unit rank orders the plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent. Ton in view of Troxel et al. fails to clearly specify wherein said rank ordering comprises: the subscriber generating a random number; and using the random number to rank order the plurality of secondary home agents.

In the same field of endeavor, Jue et al. disclose a method for rank ordering a plurality of secondary home agents, wherein the method comprises: generating a random number; and using the random number to rank order the plurality of secondary home agents (A method for

randomly selecting home agents for achieving higher load balancing gains; *Page 20, cols. 1 and 2; Page 21, col. 2; Page 22, col. 1; Page 23, col. 1*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of secondary home agents, to include features such as generating a random number and using that number to rank order the plurality of home agents in the subscriber unit as taught by Jue et al. for the purpose of, improving performance when balancing load between home agents during a high or irregular traffic volume rate.

Ton in view Troxel et al., further in view of Jue et al. fail to clearly specify the subscriber unit generating a random number.

In the same field of endeavor, Tiedemann et al. disclose a method for reducing message collision, wherein a mobile station generates a random number (*col. 4, lines 46-62*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al., further in view of Jue et al. method for rank ordering a plurality of secondary home agents, to generate a random number at the mobile station as taught by Tiedemann et al. for the purpose of delaying information broadcast at random intervals, thus avoiding collision.

Regarding **claim 12**, and as applied to claim 10, Ton in view of Troxel et al. disclose the aforementioned method wherein the subscriber unit rank orders a plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent. Ton in view of Troxel et al. fails to clearly specify wherein said rank ordering comprises: the subscriber

generating a random number; and using the random number to rank order the plurality of secondary home agents.

In the same field of endeavor, Jue et al. disclose a method for rank ordering a plurality of secondary home agents, wherein the method comprises: generating a random number; and using the random number to rank order the plurality of secondary home agents (A method for randomly selecting home agents for achieving higher load balancing gains; *Page 20, cols. 1 and 2; Page 21, col. 2; Page 22, col. 1; Page 23, col. 1*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of secondary home agents, to include features such as generating a random number and using that number to rank order the plurality of home agents in the subscriber unit as taught by Jue et al. for the purpose of, improving performance when balancing load between home agents during a high or irregular traffic volume rate.

Ton in view Troxel et al., further in view of Jue et al. fail to clearly specify the subscriber unit generating a random number.

In the same field of endeavor, Tiedemann et al. disclose a method for reducing message collision, wherein a mobile station generates a random number (*col. 4, lines 46-62*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al., further in view of Jue et al. method for rank ordering a plurality of secondary home agents, to generate a random number at the mobile station as taught by Tiedemann et al. for the purpose of delaying information broadcast at random intervals, thus avoiding collision.

9. **Claims 5-6, and 13-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ton (U.S. P.G.-Pub. No. 2002/0067704) in view of Troxel et al. (U.S. P.G.-Pub. No. 2002/0078238), further in view of Perkins ("Mobile Networking through Mobile IP"), even further in view of Fehnel (U.S. Pat. No. 5,590,092).

Regarding **claims 5 and 6**, and as both applied to claim 2, Ton in view of Troxel et al. disclose the aforementioned method wherein the subscriber unit rank orders the plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent. Ton fails to clearly specify wherein said rank ordering comprises: the subscriber unit determining a current particular point or period of time such as a current date; and using the current date to rank order the plurality of secondary home agents.

In the same field of endeavor, Perkins disclose a method for determining a current particular point or period of time such as a current date; and using the current date to rank order the plurality of secondary home agents (Wherein the network employs unique identification fields using timestamps when a subscriber unit is requesting registration with a home agent; *Page 62 col. 2 – Page 63, col. 1*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of secondary home agents, to include features such as determining a current particular period of time such as date for rank ordering a plurality of home agents as taught by Perkins for the purpose of, securing registration requests by differing each registration from another.

Ton in view Troxel et al., further in view of Perkins fail to clearly specify the subscriber unit generating a current data/time.

In the same field of endeavor, Fehnel discloses a cellular radiotelephone comprising means for generating a current time of day (*col. 3, lines 26-39*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of secondary home agents based on current particular period of time such as date to generate the current time at the subscriber unit for the purpose of generating time without the addition of a real time clock chip in the subscriber unit.

Regarding **claims 13 and 14**, and as both applied to claim 10, Ton in view of Troxel et al. disclose aforementioned method wherein the subscriber unit rank orders the plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent. Ton fails to clearly specify wherein said rank ordering comprises: the subscriber unit determining a current particular point or period of time such as a current date; and using the current date to rank order the plurality of secondary home agents.

In the same field of endeavor, Perkins disclose a method for determining a current particular point or period of time such as a current date; and using the current date to rank order the plurality of secondary home agents (Wherein the network employs unique identification fields using timestamps when a subscriber unit is requesting registration with a home agent; *Page 62 col. 2 – Page 63, col. 1*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of

secondary home agents, to include features such as determining a current particular period of time such as date for rank ordering a plurality of home agents as taught by Perkins for the purpose of, securing registration requests by differing each registration from another.

Ton in view Troxel et al., further in view of Perkins fail to clearly specify the subscriber unit generating a current data/time.

In the same field of endeavor, Fehnel discloses a cellular radiotelephone comprising means for generating a current time of day (*col. 3, lines 26-39*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of secondary home agents based on current particular period of time such as date to generate the current time at the subscriber unit for the purpose of generating time without the addition of a real time clock chip in the subscriber unit.

10. **Claim 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Ton (U.S. P.G.-Pub. No. 2002/0067704) in view of Troxel et al. (U.S. P.G.-Pub. No. 2002/0078238), further in view of Jue et al. ("Design and Analysis of Replicated Server Architecture for Supporting IP-Host Mobility").

Regarding **claim 18**, and as applied to claim 17, Ton in view of Troxel et al. disclose the aforementioned subscriber unit executing software instructions rank ordering a plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent. Ton in view of Troxel et al. fails to clearly specify wherein said rank ordering comprises:

generating a random number; and using the random number to rank order the plurality of secondary home agents.

In the same field of endeavor, Jue et al. disclose a method for rank ordering a plurality of secondary home agents, wherein the method comprises: generating a random number; and using the random number to rank order the plurality of secondary home agents (A method for randomly selecting home agents for achieving higher load balancing gains; *Page 20, cols. 1 and 2; Page 21, col. 2; Page 22, col. 1; Page 23, col. 1*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of secondary home agents, to include features such as generating a random number and using that number to rank order the plurality of home agents in the subscriber unit as taught by Jue et al. for the purpose of, improving performance when balancing load between home agents during a high or irregular traffic volume rate.

11. **Claims 19-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ton (U.S. P.G.-Pub. No. 2002/0067704) in view of Troxel et al. (U.S. P.G.-Pub. No. 2002/0078238), further in view of Perkins ("Mobile Networking through Mobile IP").

Regarding **claims 19 and 20**, and as both applied to claim 17, Ton in view of Troxel et al. disclose aforementioned subscriber unit executing software instructions causing the subscriber unit to rank order the plurality of secondary home agents into at least a first secondary home agent and a second secondary home agent. Ton fails to clearly specify wherein said rank

ordering comprises: determining a current particular point or period of time such as a current date; and using the current date to rank order the plurality of secondary home agents.

In the same field of endeavor, Perkins disclose a method for determining a current particular point or period of time such as a current date; and using the current date to rank order the plurality of secondary home agents (Wherein the network employs unique identification fields using timestamps when a subscriber unit is requesting registration with a home agent; *Page 62 col. 2 – Page 63, col. 1*).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to have Ton in view of Troxel et al. method for rank ordering a plurality of secondary home agents, to include features such as determining a current particular period of time such as date for rank ordering a plurality of home agents as taught by Perkins for the purpose of, securing registration requests by differing each registration from another.

Response to Arguments

12. Applicant's arguments filed on June 29, 2004 have been fully considered but they are not persuasive.

The Applicant argues against 35 U.S.C. § 102(e) rejection of independent **claims 1 and 15**, and the 35 U.S.C. § 103(a) rejection of independent **claim 10**, that " Ton does not disclose the subscriber unit balancing load among a plurality of home agents by the Cellular Network."

In response to the arguments of claims 1, 10, and 15 it is noted that the features upon which applicant relies (The subscriber unit balancing load among a plurality of home agents by the Cellular Network) are not recited in the rejected claims *1, 10, and 15*. Although the claims

are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore the Examiner respectfully disagrees with the Applicant's argument because Ton clearly discloses a method wherein a mobile node attempts registration with a primary Home Agent HA1, subsequently the network attempting to balanced the load between different or secondary home agents, and through the network selecting or choosing a home agent having a lower load which subsequently reads on the new cited issue on **claims 1, 10, and 15**: "The subscriber unit selecting a secondary home agent from the plurality of secondary home agents in an attempt to balance load among the plurality of secondary home agents", and does not directly imply the subscriber unit directly balancing the load among the plurality of home agents; in addition a direct statement concerning the above-mentioned issue ("the subscriber unit balancing the load") was not found throughout the Applicant's Specification and Drawings (*See Applicant's Specification Page 4, line 3 thru Page 5, line 3; Page 11, line 26 thru Page 12, line 11*). Applicant is welcomed to point out where in the specification or the drawings the Examiner can find support for the above said limitation if Applicant believes otherwise

In response to Applicants' arguments against **claims 2-9, 11-14, and 16-23**, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Therefore **claims 2-9, 11-14, and 16-23** are still rejected because they depend on and include all the limitations of base **claims 1, 10, and 15**.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Flynn (U.S. Pat. No. 6,549,522), Authentication and distribution of keys in mobile IP network.

b. Paul et al. (U.S. Pat. No. 6,314,465), Method and apparatus for load sharing on a wide area network

c. Pierce, Jr. et al. (U.S. Pat. No. 6,560,217), Virtual Home Agent Service Using Software-Replicated Home Agents.

d. Xu et al. (WO 01/06734 A2), Internet protocol networking system for mobile communication, applies home agent function in communication device as home

registration and tunneling agents to handle registration requests and redirect data traffic

15. Any response to this Office Action should be **faxed to** (703) 872-9306 or **mailed to:**

Commissioner of Patents and Trademarks

P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Crystal Park II

2021 Crystal Drive

Arlington, VA 22202

Sixth Floor (Receptionist)

16. Any inquiry concerning this communication on earlier communications from the Examiner should be directed to Ismael Quiñones whose telephone number is (703) 305-8997. The Examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

17. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9301.

18. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose number is (703) 305-4700 or call customer service at (703) 306-0377.

Ismael Quiñones

I.Q

October 7, 2004

RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER

10/16/04